

***TELOMERINA BERINGIENSIS*, A NEW SPECIES OF SPHAEROCERIDAE (DIPTERA) FROM YUKON AND ALASKA.¹**

S.A. Marshall²

ABSTRACT: *Telomerina beringiensis* is described and its relationships to other *Telomerina* species discussed.

Marshall and Roháček (1984) revised the Holarctic genus *Telomerina* Rohacek to include twelve species, and provided a cladogram for those species. At that time four species (*T. orpha* Marshall and Rohacek, *T. cana* Marshall and Roháček, *T. eburnea* Roháček, and *T. paraflavipes* (Papp)) were recognized as a monophyletic group sharing distinctively shaped spermathecae with wrinkled bodies, and a characteristically shaped male fifth sternite with 2 large posterior, setose lobes. *Telomerina beringiensis* n. sp. shares these and all other characters required for inclusion in this clade, and furthermore shares at least one unique character (posteromedial area of male sternite 5 with flat, bifid spinules) with the eastern North American *T. cana*, suggesting a sister-group relationship between these two species. *Telomerina beringiensis* differs from related species most obviously in having a broad, sinuate paramere and a relatively long third costal sector, but can also be separated from all congeners using details of the male fifth sternite, surstylus, distiphallus, and spermathecae.

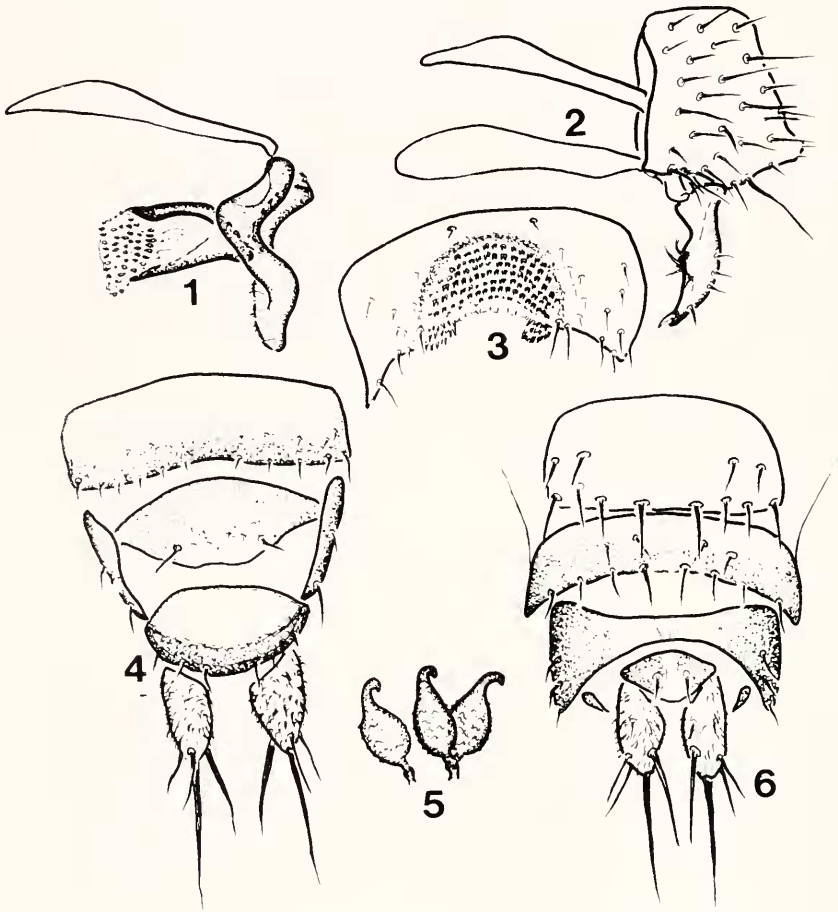
***Telomerina beringiensis* n. sp.**

Description: Body length 1.2-1.4mm; brown, pruinose except facial cavity. Postocellar bristles present; orbital setulae large, in a long row extending below eye. Interfrontal bristles in 3-4 long, subequal pairs, anterior pair shortest. Eye height 1.3-1.4 times genal height. Dorsocentral bristles in 2 pairs, anterior pair short; acrostichal setulae long, in 6 rows, prescutellar pair enlarged. Scutellum 1.3 times as wide as long, scutellar bristles as long as scutellar width. Katepisternum with a posterodorsal bristle and a minute setula in front of posterodorsal bristle. Mid tibia with an anteroventral bristle below middle and a weak ventral bristle at apex, these bristles stronger in female. Hind tibia with a dense patch of short anterodorsal hairs near apex. Wing with pale, whitish membrane; costa brownish, other veins pale. Second costal sector shorter than third (0.7 to 0.8 times as long in females, 0.8 to 0.9 times as long in males (3 of each sex measured); R_{2+3} straight, not apically curved.

Male abdomen: Sternite 5 with a large patch of flat, bifid spinules posteromedially; posterior lobes short, densely setulose (Fig. 3). Epandrium with posterior bristles longest and with 4 or 5 anteroventral bristles. Surstylus pale, basally constricted, with long hairs on anterior swelling;

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²Department of Environmental Biology, University of Guelph, Guelph, Ontario Canada, N1G 2W1.



Figs. 1-6. *Telomerina beringiensis*. 1. Aedeagus and associated structures of male, left lateral; 2. Terminalia of male, left lateral; 3. Sternite 5 of male; 4. Terminalia of female, ventral; 5. spermathecae; 6. terminalia of female, dorsal.

apically darkened, weakly bifid and with a stout, pale apical bristle (Fig. 2). Aedeagal complex large, parameres broad, sinuate; anterior surface finely setulose (Fig. 1). Basiphallus broad and flat, much shorter than distiphallus. Distiphallus simple, composed of dorsal sclerite and ventral membranous part distally covered with distinct, thorn-like spicules (Fig. 1).

Female abdomen: Tergite 7 wider than tergite 6; sparsely haired and darkly pigmented on posterior half except for small posteromedial pale notch. Epiproct short, pale. Cercus broad, with thin apical bristle (Fig. 6). Sternite 8 pale on posterior half and with long posterolateral bristles (Fig. 4). Hypoproct dark, setulose along posterior margin; bare and pale on anterior portion.

Holotype ♂: CANADA. Yukon: Forestry Camp near Dawson City, on bear feces 13.vii.1985, S. Marshall.

Paratypes: CANADA. Yukon: Dempster Hwy, Tombstone Mtn. Campground, in copula on fox feces, 12.vii.1985, S. Marshall (1♂, 1♀); Dempster Hwy. km. 141, on grizzly bear feces along Blackstone River, 11.vii.1985, S. Marshall (1♀); Dawson City, dead wolf along hydro line, 13.vii.1985, S. Marshall (1♂); Moose Creek Campground, mushroom, 3.vii.1985, S. Marshall (1♀). UNITED STATES. Alaska: Alaska Hwy., 12miN Tok, carrion, 14-20.vii.1985, S. Marshall (2♂, 2♀); 12miSummit, 86miENE Fairbanks, Hwy. 6, 909m., carrion, tundra, 6-13.viii.1984, S.&J. Peck (3♂, 2♀); Denali Nat. Pk., Primrose Pass, 3000', 22-26.vii.1984, S.&J. Peck, tundra, carrion (2♂, 4♀); Eagle Summit, 54miSW Circle, Rt. 6, 1105m, carrion, tundra, 6-13.viii.1984, S.&J. Peck (5♂, 7♀); Caribou Mt., Dalton Hwy. mi. 98, 30.vii-3.viii.1984, carrion, tundra, 2300' S.&J. Peck (1♂); Grayling Lake, Dalton Hwy. mi. 152, 31.vii-3.viii.1984, carrion, meadow-tundra S.&J. Peck (1♂); Dietrich, Dalton Hwy. mi. 209, 31.vii.3.viii.1984, carrion, scrub spruce taiga, S.&J. Peck (2♀).

The holotype and 2 paratypes are in the Biosystematics Research Centre, Ottawa. Other paratypes are in the University of Guelph collection.

LITERATURE CITED

Marshall, S.A. and J. Roháček, 1984. A revision of the genus *Telomerina* Roháček (Diptera, Sphaeroceridae). Syst. Entomol. 9:127-163.